

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11413125

Catalog # : 07512ET3E405T-W22

Frame	: 404/5T	Locked rotor time	: 30s (cold) 17s (hot)
Output	: 75 HP (55 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 170/84.9 A	Protection degree	: IP55
L. R. Amperes	: 1087/543 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 60.0/30.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1184 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 1.33 %	Starting method	: Direct On Line
Rated torque	: 333 ft.lb	Approx. weight ³	: 1203 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 40.2 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.1 93.5 93.5 93.5 91.8 92.4 92.4	94.5 94.0 94.0 94.0 92.2 92.8 92.8	94.5 94.1 94.1 94.1 92.4 93.0 93.0	Max. traction	: 2045 lb
Power Factor	0.74 0.66 0.62 0.60 0.79 0.76 0.74	0.83 0.79 0.75 0.74 0.85 0.84 0.83	0.86 0.85 0.83 0.81 0.87 0.86 0.86	Max. compression	: 3247 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	6.3	6.8	6.8	6.8	9.0	8.2	8.2
	P2 (0,5;1,0)	5.0	5.5	5.5	5.5	7.6	6.8	6.8
	P3 (0,25;1,0)	4.5	4.9	4.9	4.9	7.0	6.3	6.3
	P4 (0,9;0,5)	3.5	3.7	3.7	3.7	4.7	4.4	4.4
	P5 (0,5;0,5)	2.3	2.5	2.5	2.5	3.3	3.0	3.0
	P6 (0,5;0,25)	1.7	1.8	1.8	1.8	2.4	2.2	2.2
	P7 (0,25;0,25)	1.1	1.2	1.2	1.2	1.6	1.5	1.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	16000 h	17000 h
Lubricant amount	:	34 g	27 g
Lubricant type	:	Mobil Polyrex EM	

Notes:

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	29/03/2024			
		Page		Revision
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